

### **Amendments To The Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

#### **Listing of Claims:**

- 1 1. (cancelled)
- 1 2. (currently amended) The method of Claim + 48 wherein a ratio of a duration of the  
2 groups of sounds to a ratio of a duration of the ~~first~~ long silent periods is less than 1:1.
- 1 3. (currently amended) The method of Claim + 48 wherein at least one of the plurality of  
2 different groups of audible sounds includes a plurality of sounds at different audible  
3 frequencies.
- 1 4. (currently amended) The method of Claim 3 wherein at least one of the plurality of  
2 different groups of audible sounds includes a plurality of sounds at different audible  
3 frequencies separated by ~~second~~ short silent periods between the sounds within the group of  
4 sounds, said ~~second~~ short silent periods having a duration similar to the duration of the  
5 sounds included in the group of sounds.
- 1 5. (cancelled)
- 1 6. (currently amended) The method of Claim + 48 wherein the groups of sounds include  
2 sounds in the audible frequency range of 1 kHz to 10 kHz.
- 1 7. (original) The method of Claim 6 wherein the groups of sounds include sounds in the  
2 audible frequency range of 1 kHz to 5 kHz.
- 1 8. (currently amended) The method of Claim + 48 comprising additionally determining  
2 a speed of the moving vehicle and adjusting a volume of the sound pattern projected from the  
3 moving vehicle based on the determined speed of the moving vehicle.
- 1 9. (original) The method of Claim 8 comprising automatically initiating the projection  
2 of the sound pattern from the moving vehicle when the determined speed of the moving  
3 vehicle exceeds a selected threshold speed and automatically terminating the projection of the  
4 sound pattern from the moving vehicle when the determined speed of the moving vehicle is  
5 less than the selected threshold speed.

1 10. (original) The method of Claim 8 wherein determining a speed of the moving vehicle  
2 includes determining a speed of the moving vehicle from an on-board vehicle computer.

1 11. (currently amended) The method of Claim ~~1~~ 48 comprising additionally determining  
2 a location of the moving vehicle and automatically adjusting the sound pattern projected from  
3 the moving vehicle in response to the determined location of the moving vehicle.

1 12. (original) The method of Claim 11 wherein determining a location of the moving  
2 vehicle includes determining a location of the moving vehicle using a global positioning  
3 system.

1 13. (cancelled)

1 14. (currently amended) The animal alerting device of Claim ~~13~~ 49 wherein the control  
2 circuit includes a microprocessor and memory, wherein the memory includes data defining a  
3 the plurality of different groups of audible sounds, and wherein the microprocessor is  
4 programmed to select randomly from among the data defining the plurality of different  
5 groups of audible sounds to generate the sound generation control signals.

1 15. (currently amended) The animal alerting device of Claim ~~13~~ 49 wherein a ratio of a  
2 duration of the groups of sounds to a duration of the ~~first~~ long silent periods is less than 1:1.

1 16. (original) The animal alerting device of Claim 14 wherein the data defining a  
2 plurality of different groups of audible sounds defines at least one of the plurality of different  
3 groups of sounds including a plurality of sounds at different audible frequencies.

1 17. (currently amended) The animal alerting device of Claim 16 wherein the data  
2 defining at least one of the plurality of different groups of audible sounds includes data  
3 defining at least one of the plurality of different groups of sounds including a plurality of  
4 sounds at different audible frequencies separated by ~~second~~ short silent periods between the  
5 sounds within the group of sounds, said ~~second~~ short silent periods having a duration similar  
6 to a duration of the sounds included in the group of sounds.

1 18. (cancelled)

1 19. (currently amended) The animal alerting device of Claim ~~13~~ 49 wherein the groups of  
2 sounds include sounds in the audible frequency range of 1 kHz to 10 kHz.

1 20. (original) The animal alerting device of Claim 19 wherein the groups of sounds  
2 include sounds in the audible frequency range of 1 kHz to 5 kHz.

1 21. (currently amended) The animal alerting device of Claim ~~13~~ 49 wherein the control  
2 circuit is adapted to determine a speed of the vehicle and to adjust a volume of the sound  
3 pattern produced from the speaker based on the determined speed of the vehicle.

1 22. (original) The animal alerting device of Claim 21 wherein the control circuit is  
2 adapted automatically to initiate the production of the sound pattern from the speaker when  
3 the determined speed of the vehicle exceeds a selected threshold speed and automatically to  
4 terminate the production of the sound pattern from the speaker when the determined speed of  
5 the vehicle is less than the selected threshold speed.

1 23. (original) The animal alerting device of Claim 21 wherein the control circuit is  
2 coupled to an on-board vehicle computer to determine a speed of the vehicle.

1 24. (original) The animal alerting device of Claim 23 wherein the control circuit is  
2 coupled to an on-board vehicle computer via an OBD-II port connection.

1 25. (currently amended) The animal alerting device of Claim ~~13~~ 49 wherein the control  
2 circuit is adapted to determine a location of the moving vehicle and automatically to adjust  
3 the sound pattern produced from the speaker in response to the determined location of the  
4 vehicle.

1 26. (original) The animal alerting device of Claim 25 wherein the control circuit is  
2 coupled to a global positioning system receiver to determine a location of the moving vehicle.

1 27. (currently amended) The animal alerting device of Claim ~~13~~ 49 wherein the speaker  
2 is a piezo-electric speaker.

1 28. (original) A method for alerting animals to prevent animal-vehicle crashes,  
2 comprising: projecting from a moving vehicle a sound pattern comprising groups of sounds  
3 separated by silent periods, wherein each group of sounds includes one or more sounds in an  
4 audible frequency range, and wherein a ratio of a duration of the groups of sounds to a  
5 duration of the silent periods in the sound pattern is less than 1:1.

29. (original) The method of Claim 28 wherein the groups of sounds included in the sound pattern include a plurality of different groups of sounds.

30. (original) The method of Claim 29 comprising additionally including the groups of sounds in the sound pattern in a random sequence.

31. (original) The method of Claim 28 wherein at least one of the plurality of different groups of sounds includes a plurality of sounds at different frequencies.

32. (original) The method of Claim 31 wherein at least one of the plurality of different groups of sounds includes a plurality of sounds at different frequencies separated by second silent periods between the sounds within the group of sounds, said second silent periods having a duration similar to a duration of the sounds included in the group of sounds.

33. (original) The method of Claim 28 wherein the groups of sounds include sounds in the audible frequency range of 1 kHz to 10 kHz.

34. (original) The method of Claim 33 wherein the groups of sounds include sounds in the audible frequency range of 1 kHz to 5 kHz.

35. (original) An animal alerting device adapted for mounting on a vehicle to prevent animal-vehicle crashes, comprising:

a speaker;

a driver circuit coupled to the speaker for driving the speaker in response to sound generation control signals received thereby; and

a control circuit coupled to the driver circuit and adapted to generate the sound generation control signals for producing via the driver circuit and speaker a sound pattern comprising groups of sounds separated by silent periods, wherein each group of sounds includes one or more sounds in an audible frequency range, and wherein a ratio of a duration of the groups of sounds to a duration of the silent periods in the sound pattern is less than 1:1.

36. (original) The animal alerting device of Claim 35 wherein the control circuit includes a microprocessor and memory, wherein the memory includes data defining a plurality of different groups of sounds, and wherein the microprocessor is programmed to select randomly from among the data defining the plurality of different groups of sounds to generate the sound generation control signals.

1 37. (original) The animal alerting device of Claim 36 wherein the data defining a  
2 plurality of different groups of sounds defines at least one of the plurality of different groups  
3 of sounds including a plurality of sounds at different frequencies.

1 38. (original) The animal alerting device of Claim 37 wherein the data defining at least  
2 one of the plurality of different groups of sounds includes data defining at least one of the  
3 plurality of different groups of sounds including a plurality of sounds at different frequencies  
4 separated by second silent periods between the sounds within the group of sounds, said  
5 second silent periods having a duration similar to the duration of the sounds included in the  
6 group of sounds.

1 39. (original) The animal alerting device of Claim 35 wherein the groups of sounds  
2 include sounds in the audible frequency range of 1 kHz to 10 kHz.

1 40. (original) The animal alerting device of Claim 39 wherein the groups of sounds  
2 include sounds in the audible frequency range of 1 kHz to 5 kHz.

1 41. (original) The animal alerting device of Claim 35 wherein the speaker is a  
2 piezoelectric speaker.

1 42. (original) A method for alerting animals to prevent animal-vehicle crashes,  
2 comprising:

- 3 (a) projecting from a moving vehicle a sound pattern;
- 4 (b) determining a location of the moving vehicle; and
- 5 (c) adjusting automatically the sound pattern projected from the moving vehicle in  
6 response to the determined location of the moving vehicle.

1 43. (original) The method of Claim 42 wherein the sound pattern comprises a plurality of  
2 randomly selected different groups of audible sounds separated by silent periods between the  
3 groups of sounds, wherein each group of sounds includes one or more sounds in an audible  
4 frequency range.

1 44. (original) The method of Claim 42 wherein determining a location of the moving  
2 vehicle includes determining a location of the moving vehicle using a global positioning  
3 system receiver.

1 45. (original) An animal alerting device adapted for mounting on a vehicle to prevent  
2 animal-vehicle crashes, comprising  
3 (a) a speaker;  
4 (b) a driver circuit coupled to the speaker for driving the speaker in response to  
5 sound generation control signals;  
6 (c) location determining means for determining a location of the vehicle; and  
7 (d) a control circuit coupled to the driver circuit and to the location determining  
8 means and adapted to generate the sound generation control signals for producing via the  
9 driver circuit and speaker a sound pattern and to adjust automatically the sound pattern  
10 produced from the speaker in response to the determined location of the vehicle.

1 46. (original) The animal alerting device of Claim 45 wherein the location determining  
2 means includes a global positioning system receiver.

1 47. (original) The animal alerting device of Claim 45 wherein the speaker is a piezo-  
2 electric speaker.

1 48. (new) A method for alerting animals to prevent animal-vehicle crashes, comprising:  
2 projecting from a moving vehicle a sound pattern comprising a plurality of different  
3 groups of sounds, wherein each of the plurality of different groups of sounds includes a  
4 plurality of sounds in an audible frequency range separated by short silent periods, including  
5 automatically randomly selecting a one of the plurality of different groups of sounds to be  
6 projected from the moving vehicle followed by a long silent period that is longer in duration  
7 than the short silent periods and repeating the automatic random selection of sound groups  
8 followed by long silent periods to generate the sound pattern projected from the moving  
9 vehicle.

1 49. (new) An animal alerting device adapted for mounting on a vehicle to prevent  
2 animal-vehicle crashes, comprising:  
3 a speaker;  
4 a driver circuit coupled to the speaker for driving the speaker in response to sound  
5 generation control signals received thereby; and  
6 a control circuit coupled to the driver circuit and adapted to generate the sound  
7 generation control signals for producing via the driver circuit and speaker a sound pattern  
8 comprising a plurality of different groups of sounds, wherein each of the plurality of different

9 groups of sounds includes a plurality of sounds in an audible frequency range separated by  
10 short silent periods, wherein the control circuit is adapted to automatically randomly select a  
11 one of the plurality of different groups of sounds followed by a long silent period that is  
12 longer in duration than the short silent periods and to repeat the automatic random selection  
13 of sound groups followed by long silent periods.